Nebraska Board of Public Roads Classifications & Standards (NBCS) - Minimum Standards

Upcoming Changes and What You Should Know

Current Standards

Nebraska Department of Roads State Highways
- Maintenance
- (3R) Resurfacing, Restoration and Rehabilitation
- Reconstruction Design
- New Construction Design
- Construction (NDOR Standard Specifications)

Counties & Municipalities
- Maintenance
- Reconstruction Design
- New Construction Design
- Construction (NDOR Standard Specifications)

Maintenance / Preservation
The Board’s Definition
- The preservation and upkeep of a highway or street including all its elements, in a condition as near as is practical to the original or as constructed condition in order to provide the road user with a safe and convenient highway facility.

Anything More – Go to New & Reconstruction Standards

Lack of 3R Standards
- Public funds
- Public safety
- Relaxation of standards requests
- Consistency – industry and state standards
- Compliance
- One- and six-year plans
NBCS Decision to Pursue 3R Standards for County Road and Municipal Streets

• May, 2013 decision
• Purpose: Propose 3R standards for county roads, municipal streets and bridges, including basic criteria and definitions, and any other associated incidental updates to NBCS rules and regulations.

Actions Taken

• 3R Standards Committee
• 3R Standards Advisory Committee
• NDOR Technical Support
• Committee Meetings
• Draft Tables and Definitions Available Today

Multiple Standards that Govern Design

• FHWA Standards as described in 23 CFR 625
• AASHTO POLICY on the Geometric Design of Highways and Streets – the Green Book was developed as a guide to roadway engineering and is the FHWA Standard for the National Highway System (NHS)
• TRB Special Report 214 – Designing Safer Roads
• Americans With Disabilities Act Accessibility Guidelines – Access Board
• NBCS Minimum Standards, Title 428 NAC
• Nebraska State Law
• Local Standards, when applicable

3R Standards – Enables County to

• Preserve and improve existing roadway, bridge and roadside features
• Improve safety
• Extend the life of the facility
• WITHOUT cost of full reconstruction
• WITHOUT requesting a Relaxation of Standards

3R Standards – a Good Use of Public Funds
How 3R Works

- Extending the life of the facility - a typical project purpose
- Fair to Poor conditions, needing repair and rehabilitation
- Safety conscious design
- More than one level of design standard can be applied to a project.
  - Example: a segment that is a mill 2” and place 2” designed to maintenance standards, a segment that is a mill 4” place 4” designed to 3R standards, and a segment that replaces a bridge, box or culvert designed to the reconstruction standard.
- Within a segment designed to 3R standards, if there is good reason for not meeting a threshold 3R standard, the Board will consider a relaxation request.

Current versus Proposed Discussion and Examples

<table>
<thead>
<tr>
<th>Current Standards</th>
<th>Proposed Standards</th>
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<tbody>
<tr>
<td>New &amp; Reconstruction</td>
<td>3R, unless something else drives the project New &amp; Reconstruction.</td>
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Adding an Auxiliary Lane

Minor Widening

<table>
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**Minor Alterations**

**Grades and Curves**

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**Resurfacing**

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<td>New &amp; Reconstruction</td>
<td>3R, if the base is not removed, replaced, reconstructed or strengthened. Minor base repair is allowable under 3R.</td>
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**Building Sidewalk Ramps**

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<td>New &amp; Reconstruction</td>
<td>Maintenance (see definitions page 2 “For the purposes . . .”) unless something else drives the project into 3R or New &amp; Reconstruction.</td>
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<td>Correct anything along the project that does not meet standards</td>
<td>No design relaxation requests necessary</td>
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**Bridges**

- **3R expressed in two ways:**
  - Rehabilitated
  - Remain in Place
Timber Bridges – Proposed Clarification

Functional Classification Local
400 ADT and less

Maintenance includes replacement of entire superstructure with an in-kind timber superstructure

Bridge Project Example

• Steel Girder Bridge, 20 ft width, single span, 200 ADT
• Functional Classification: Local
• Problem: asphalt wearing surface deteriorates too quickly
• Cause: too much steel flexure
• Solution: add a bent, or shear studs and a concrete deck

Current Standards | Proposed Standards
--- | ---
New & Reconstruction | Remain in Place
HL-93 loading | Original design loading or, if unknown, H5-15. Note, if ADT<400, bridge could be load posted after the project.
New & Reconstruction width 26’ | Existing width 20’
3R Standards – Why?

- Stretches public funds
- Clearer Scoping decisions
- Fewer relaxation of standards requests
- Safety improvements
- Brings Board standards into line with other requirements

3R Standards for County Roads and Municipal Streets - Timeline

- June 11, 2014 – Presentation made to County Highway Superintendents for feedback
- Fall 2014 – Outreach presentations to engineering and other trade associations
- Spring 2015 – Finalize standards
- Summer 2015 – Begin rulemaking process to adopt final standards in accordance with the Administrative Procedures Act
- Fall 2015 – New standards become effective

The Board asks that you

- Review and comment on the tables and definitions
  - Comments go to LeMoyne Schulz
  lemoyne.schulz@nebraska.gov
- Support the establishment of 3R standards
  - Let elected officials know you are in support

3R Standards

- Questions?
- Comments?